COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

May 20, 2015
Facilitation Team's Summary
Facilitator, Emily Plummer; Notes, Tory Hines DS Consulting

The following Facilitator's Summary is intended to capture basic discussion, decisions and actions, as well as point out future actions or issues that may need further discussion at upcoming meetings. These notes are not intended to be the "record" of the meeting, only a reminder for TMT members.

Review of Meeting Minutes

The May 4th and May 6th Official Minutes and Facilitation Team's Summary were approved, pending the following change, noted by Paul Wagner, NOAA, to the May 6th Facilitation Team's Summary:

• Under Operations Review for Fish to read "for adults, 152,000 Spring Chinook passed Bonneville." The summary had stated that 857,000 adult Spring Chinook had passed Bonneville.

The May 13th Official Minutes and Facilitation Team's Summary will be reviewed at the next in-person session.

Dworshak Operations

Steve Hall, USACE-Walla Walla, provided an update on Dworshak operations. He noted the current elevation is at 1,591ft and the reservoir is slowly filling. Steve reported that as coordinated at TMT, the project released 5kcfs on May 16th, 7.5kcfs on May 17th, 5kcfs on May 18th, and then reduced to minimum flows on May 19th. Steve noted that modeling indicates the reservoir will fill between June 5th and June 20th based on similar historic water years. Paul Wagner noted that he was pleased to hear that refill is likely to occur before the end of June. Charles Morrill, WA, asked Steve whether the precipitation signaled for in NOAA forecasts will help the reservoir over the next few days. Steve indicated that he anticipates that observed precipitation will be less than forecasted, noting that previous forecasts suggested an increase in inflows up to 11-12kcfs, yet only 7-8kcfs was observed.

SOR- FWS#1 - Libby Dam Release for Sturgeon and Bull Trout

Joel Fenolio, COE Seattle, provided an update on the Libby Dam flow release for sturgeon and bull trout. He noted that the sturgeon flow planning team met yesterday and decided to start the operation on Friday, May 22nd. Libby will operate at full powerhouse, 26.5kcfs, beginning on Friday, May 22nd and continuing for 7 days. On Friday, May 29th, the operation will ramp down to 20kcfs and hold for 4 to 5 days and attempt to refill the pool. Erick Van Dyke, OR, asked what the temperature of the water is expected to be during the pulse? Joel noted that the water temperature between LIB and Bonners Ferry is at 50 degrees Fahrenheit.

➤ **ACTION:** The Action Agencies will implement SOR-FWS#1; an update will be provided at the next TMT meeting.

McNary Flow Objectives

Paul Wagner, NOAA, reported that given the low water year FPAC would like to suggest that McNary outflows average 210kcfs starting Friday through the remainder of May, however, without drafting Grand Coulee below 1,248ft by the end of May. Mary Mellema, BOR, noted that there may be elevation fluctuations throughout May, but end of the month elevations will not be below 1,248ft. Mary continued that flows in excess of 210kcfs, will go towards refilling Grand Coulee. Mary also noted that this operation will impact June flows coming out of Grand Coulee. Paul stated that the current operation borrows future water to aid juveniles during prime spring migration periods in May and works within the challenging conditions in a dry water year. Jim Litchfield, MT, asked where there is flexibility for outflows averaging 210kcfs, he noted that current inflows appear to be more in the 100k range. Mary noted that they expect inflows will be variable, resulting in fluctuations in elevation. Mary also noted that in June Grand Coulee will target refill, not flows. Sheri Sears, Colville, noted that the Tribe will need to release hatchery fish and that it is important for the pool to start refill by June 1st.

➤ **ACTION**: Beginning Friday, May 22, the Action Agencies will operate McNary to target an average outflow of 210kcfs through the end of May, without drafting Grand Coulee below 1,248ft by May 31st, and storing any flows in excess of 210 kcfs for Coulee refill. TMT will reassess flow objectives at the next TMT meeting.

Treaty Fishing SOR 2015-C1 (May 19-22)

Kyle Dittmer, CRITFC, presented SOR 2015-C1 - Treaty Fishing. The SOR requests that Bonneville, The Dalles and John Day pools are operated within a 1.5 foot band during the Treaty fishing period from Tuesday, May 19, 2015 through Friday, May 22, 2015. Kyle noted that the total fish forecast for adult spring chinook is an estimated 235,000 fish, well above the average. He continued that this run will create harvest opportunities for Tribal fishers who will exercise their Treaty rights by participating in the harvest using platform and gillnet fishing methods. Scott Bettin, BPA, requested CRITFC notify the Corps with specific dates and times of the next fishing season, as BPA will have to coordinate around a BON pool operation for transformer unloading at The Dalles. Kyle extended appreciation to the Action Agencies for their effort in implementing the SOR.

➤ **ACTION:** The Action Agencies initiated SOR 2015-C1 on May 19th at 0600 hours, they will continue to implement the SOR through May 20th at 1800 hours. Kyle will coordinate the next Treaty fishing SOR with the AAs as soon as possible.

Operations Review

Reservoirs: Mary Mellema, BOR, reported on Reclamation projects:

- Grand Coulee elevation was 1,248.9ft.
- Hungry Horse elevation was 3,539.6ft with 6.3kcfs outflow and inflows at 6.6kcfs.

Lisa Wright, COE-NWD, reported on Corps projects:

- Libby was at elevation 2,422.9ft, with 18.3kcfs inflow and 17.3kcfs outflow.
- Albeni Falls was at elevation 2,058.6ft, with 31.9kcfs inflow and 20.8kcfs outflow.
- Dworshak was at elevation 1,590.8ft with 7.5kcfs inflow and 1.5kcfs outflow.
- Lower Granite average inflow was 63.4kcfs.
- McNary average inflow was 204.7kcfs.

• Bonneville average inflow was 205.9kcfs.

Fish: Paul Wagner, NOAA, reported on fish. For adults, 191,000 spring Chinook passed Bonneville this year so far (160-170% of the ten year average). Jack counts at Bonneville approached 9,000, well below the ten year average; Paul suggested the warm water mass in the Pacific may have influenced Jack numbers and the low numbers may be an indicator of low counts next year. At Lower Granite, 81,000 spring Chinook have passed, this number is high for this time of year however the fish are running earlier compared to prior years. While numbers upstream are 400% of the ten year average, the numbers will slowly converge as the season winds down and percentages will likely fall closer to the ten year average. It is noteworthy that the passage times are earlier than past years.

For juveniles, the passage index at various projects indicates spring Chinook numbers are winding down as expected. Yearling Chinook passage at all of the lower Snake projects is on a downward trend, with the Lower Granite peak occurring on May 7th. At Bonneville, McNary and John Day spring Chinook are still passing in strong numbers, with numbers very strong at Bonneville. Subyearling fish were recently released in the Snake and will be picking up at Snake River projects. For Steelhead, Lower Granite numbers have flat-lined. Little Goose showed an increase to around 20,000 fish and some increases were seen at Lower Monumental, McNary, John Day and Bonneville. The Idaho hatchery program released Sockeye recently and those fish appeared at Lower Granite, Little Goose and Lower Monumental. For lamprey, juvenile numbers remain low, however, they are showing up at McNary, John Day, Little Goose and Bonneville.

Water Quality: Tina Lundell, COE-NWD, reported on water quality, noting that all tailwater and forebay gauges are working properly. She noted that the John Day tailwater gauge was fixed on Wednesday, May 20th, to correct the voltage problem. She noted that Ice Harbor forebay recorded two TDG exceedences for the 12 hour average: one on Wednesday, May 13th, as well as one on May 19th at 115.8%. TDG levels in the IHR tailrace are still high today and exceeding 115%.

Power System: Nothing to report.

The next TMT meeting will be a conference call on May 27th at 9:00am.

Columbia River Regional Forum TECHNICAL MANAGEMENT TEAM—OFFICIAL MINUTES

May 20, 2015

Minutes: Pat Vivian

Representatives of BPA, BOR, COE, Montana, Washington, USFWS, Oregon, NOAA, Nez Perce Tribe, DS Consulting, CRITFC/Umatilla, Idaho and others participated in today's TMT meeting. Doug Baus, COE, chaired the discussion, with facilitation by Emily Plummer, DS Consulting. This summary is an official record of the proceedings, not a verbatim transcript.

2. Review Meeting Minutes - May 4, 6 and 13

Paul Wagner, NOAA, said the May 13 facilitator's summary reported 852,000 spring chinook passing Bonneville; the actual count was 152,000. Review of the May 13 official notes and facilitator's summary was deferred until next week. The May 4 and 6 notes and summary were approved as final.

3. Libby Dam Releases for Sturgeon and Bull Trout

Libby will begin releasing flows for the sturgeon pulse on May 22, with up to 26.5 kcfs or full powerhouse, then 7 days of peak flows, Joel Fenolio, COE, reported. The ramp down to 20 kcfs is expected to begin May 29 and continue for the next 4-5 days. Following that, Libby will release summer flows and attempt refill. Erick Van Dyke, Oregon, asked what temperature the releases will be; Fenolio said the criteria for temperature control is 50 degrees F. TMT will receive updates on the sturgeon and bull trout operation as needed.

4. Dworshak Operations

Dworshak is at elevation 1591 ft and slowly filling, Steve Hall, COE, reported. The augmentation release was performed as coordinated at TMT last week, with flows ramping up on May 16 to 5 kcfs, and again on May 17 to 7.5 kcfs, back to 5 kcfs on May 18, then down to minimum flows on May 19. Modeling based on similar historic years shows that, hopefully, inflows will fill the reservoir sometime from June 5-20.

The NOAA forecast for precipitation over the next few days might help, Charles Morrill, Washington, suggested. Unfortunately, satellite traces indicate that precipitation will pass north of the basin, Hall replied. Last week the peak was projected to be 11-12 kcfs, but only 7-8 kcfs materialized. There may be problems with the modeling. Due to inclement weather, the COE has been unable to conduct a snow flight in the basin to assess remaining snowpack.

5. McNary Flow Objectives

FPAC discussed McNary flow objectives for the coming week, and the consensus was to request 210 kcfs target average over the next 11 days, contingent on a minimum Grand Coulee elevation of 1248 ft by the end of the month, Paul Wagner, NOAA, reported. There may be fluctuations at Coulee to meet the target McNary flow, Mary Mellema, BOR, said. If inflows are higher than 210 kcfs, the excess will go toward Coulee refill. It was acknowledged that providing flows in May for peak juvenile migration time will impact augmentation flows in June as refill begins. June flows out of Coulee will be based on refill projections instead of flow targets. The minimum elevation of 1248 ft is a hedge against low inflows in July and August, Tony Norris, BPA, reported.

Sheri Sears, Colville Tribe, said the hatchery will hold fish until June 1. Hopefully, refill will begin on that date and it will be safe to release the fish then. The Tribe will confer with BOR on details of the hatchery release.

The requested operation of 210 kcfs average McNary outflows will begin on May 22 and continue until the end of May.

6. Treaty Fishing SOR

Kyle Dittmer, CRITFC, presented SOR 2015-C1 which requests 1.5 ft elevation bands for treaty fishing from May 19-22. Based on catch over Memorial Day weekend, the Tribes may decide to fish next weekend as well.

The total spring Chinook forecast this year is 235,000 by June 15, compared to last year's forecast of 207,000 spring Chinook. Scott Bettin, BPA, asked whether next week will be a full week of fishing, and Dittmer said the Tribes would decide on May 26 whether to fish May 27-29. The COE will implement the SOR on May 19-22.

7. Operations Review

7a. Reservoirs. Hungry Horse is at 3539.6 ft, releasing 6.3 kcfs, with inflows of 6.6 kcfs. Grand Coulee is at elevation 1248.9 ft. Libby is at elevation 2422.9 ft, with average inflows of 18.3 kcfs and outflows of 17.3 kcfs. Albeni Falls is at elevation 2058.6 ft with inflows of 31.9 kcfs and discharges of 20.8 kcfs. Dworshak is at elevation 1590.8 ft, with average inflows of 7.5 kcfs, releasing minimums of 1.5 kcfs. Lower Granite average outflows are 63.4 kcfs, McNary outflows are 204.7 kcfs, and Bonneville outflows are 205.9 kcfs.

7b. Fish. Paul Wagner, NOAA, reported.

Adults: This is peak spring Chinook passage time, with 191,000 having passed Bonneville so far this year, which is 160-170% above the 10 year average. Jack counts are approaching 9,000 at Bonneville, which is well below the 10 year average. It's possible the low jack count can be attributed to a mass of warm water in the northeast

Pacific Ocean, but next year's run could be poor as jacks are generally an indicator of next year's adult returns. Moving upsteam, the trend continues. The Lower Granite spring Chinook count of 81,000 is a high number for this time of year, around 400% of the 10 year average.

<u>Juveniles</u>: According to passage index counts, yearling spring Chinook are winding down, which is to be expected this time of year. Passage peaked around May 7 in response to the first Dworshak operation, but the latest operation didn't bring passage increases at Lower Granite, Little Goose and Lower Monumental. At McNary, John Day and Boneville, spring Chinook are still passing in good numbers. Subyearling Chinook have been released from hatcheries, and a large release on the Snake should show up soon at Lower Granite. Subyearling passage is picking up at all projects. As for steelhead, the Lower Granite numbers didn't pick up dramatically. Little Goose passage increased from an index count of 20,000 to 46,000, with Lower Monumental seeing some increase as well. This is prime steelhead passage time at McNary, John Day and Bonneville.

Sockeye releases in Idaho have showed up at Lower Granite, Little Goose and Lower Monumental, as well as the upper Columbia projects. Lamprey are passing McNary, John Day, Bonneville and Little Goose, but not in huge numbers. The trend this year at the Snake projects is for below average index counts. McNary passage timing is following expected trends. Bonneville is seeing higher numbers of fish, possibly because only the 2nd powerhouse is operating.

7c. Water Quality. All forebay and tailwater gages are operating, Tina Lundell, COE, reported. The John Day tailwater gage was fixed on May 13, one day after it shut down due to voltage problems. Since last week there have been 2 TDG exceedances in the Ice Harbor forebay with 115.8% TDG yesterday.

7d. Power. There was nothing to report.

8. Next TMT Meeting

TMT will meet next in a May 27 conference call, with updates on the sturgeon/bull trout release from Libby, as well as McNary flow objectives and the treaty fishing SOR.

Name	Affiliation
Tony Norris	BPA
Mary Mellema	BOR
Jim Litchfield	Montana
Charles Morrill	Washington
Joe Skalicky	USFWS
Erick Van Dyke	Oregon
Lisa Wright	COE
Paul Wagner	NOAA

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